ABSTRACT OF THE DISCLOSURE

A vehicle testing apparatus and method which facilitates tracing and isolating of short circuits. The tester preferably provides a user-selected constant current level (i.e. 1, 3 and 6 amperes) for driving a vehicle short under test at a constant current level compatible with the circuit. Any significant changes in the conductance of the vehicle short under test are registered in response to circuit voltage changes. An annunciator is activated in response to sudden significant conductance changes (preferably conductance decreases) which exceed a threshold level. Annunciation (preferably including audio output) allows the operator to immediately correlate movements of specific regions of wiring, or other circuit elements, with changes in the detected short conductance for the shorted circuit being tested. By way of example and not of limitation the tester may be implemented inexpensively with low cost analog circuitry, and does not require incorporating a microcontroller.